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Mr. Sam Borries On-Scene Coordinator USEPA Region 5 77 West Jackson Boulevard (SE-5J) Chicago, IL 60604-3590

SEDIMENTS

Date:

Contact:

Phone:

Subject

Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Plainwell No. 2 Dam Area Time-Critical Removal Action Monthly Report (October 2009)

Dear Sam:

Attached is the 4th monthly progress report for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Plainwell No. 2 Dam Area Time-Critical Removal Action (TCRA). This progress report is submitted in accordance with Paragraph 19a of the June 2009 Administrative Settlement Agreement and Order on Consent (AOC) for Removal Action (Docket No. V-W-09-C-925). On August 5, 2009, the United States Environmental Protection Agency determined that future updates on the Former Plainwell Impoundment TCRA project will be included in this monthly report. Per the August 6, 2009 direction of the United States Environmental Protection Agency, monthly reports will only be submitted electronically.

If you have any questions, please do not hesitate to contact me.

Our ref:

B0064536.0001.00014

November 13, 2009

Steve Garbaciak

312.332.4937 ext. 12

steve.garbaciak@

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Sincerely,

ARCADIS

Stephen Garbaciak Jr., P.E. Vice President

Stephen Harbari

Copies:

Mike Ribordy, USEPA Leslie Kirby-Miles, USEPA Richard Karl, USEPA James Saric, USEPA Paul Bucholtz, MDEQ Jeff Keiser, CH2M HILL Kathy Huibregtse, RMT Inc. Richard Gay, Weyerhaeuser Company Martin Lebo, Weyerhaeuser Company J. Michael Davis, Esq., Georgia-Pacific LLC Paul Montney, P.E., Georgia-Pacific LLC L. Chase Fortenberry, P.G., Georgia-Pacific LLC Garry Griffith, P.E., Georgia-Pacific LLC Michael Erickson, P.E., ARCADIS

MONTHLY REPORT FOR THE ALLIED PAPER, INC./PORTAGE CREEK/ KALAMAZOO RIVER SUPERFUND SITE PLAINWELL NO. 2 DAM AREA TIME-CRITICAL REMOVAL ACTION

REPORT #4, OCTOBER 2009

PREPARED BY ARCADIS NOVEMBER 13, 2009 ON BEHALF OF GEORGIA-PACIFIC LLC

SUBMITTED TO

SAM BORRIES, ON-SCENE COORDINATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REPORT #4, OCTOBER 2009

Significant Developments and Activities During the Period

- On October 1, United States Environmental Agency (USEPA) approved a 30-day extension to the
 original 30-day time frame to provide backup documenting all costs associated with mobilization
 activities, as defined in Paragraph 39c of the AOC.
- On October 1, ARCADIS submitted to USEPA information regarding the revised excavation plan and canoe portage details for Removal Area 5A. The excavation plan was revised due to the presence of a guy wire at the downstream end of Removal Area 5A. ARCADIS received approval from USEPA for the revised plan on October 14.
- On October 1, Michigan Department of Natural Resources (MDNR) provided ARCADIS permission to installed river closure signs and buoys in the Kalamazoo River.
- On October 5, 6, 8, 9, 13, 16, 19, 20, 23, 27, and 30 ARCADIS submitted to Weston (USEPA subcontractor) copies of turbidity monitoring logs, air monitoring logs, analytical data, waste manifests and/or chains of custody.
- On October 5 and 21, ARCADIS received analytical data for split samples collected by Weston.
- On October 5, ARCADIS submitted the 8th Weekly Construction Update for the Plainwell No. 2 Dam Area TCRA to USEPA and Michigan Department of Environmental Quality (MDEQ).
- On October 5, ARCADIS received from USEPA notification of a change in the USEPA On-Scene Coordinator (OSC) from Mike Ribordy to Sam Borries.
- On October 6, Georgia-Pacific LLC and ARCADIS received notification from that that they were approved to join the Kalamazoo River Phosphorus Point Source Total Maximum Daily Loads (TMDL) cooperative agreement.
- On October 6, ARCADIS received notification from MDEQ that Substantive Requirements Document (SRD) MIU99028 had been approved and was effective immediately. A hard copy of the SRD was received on October 26.
- On October 6, ARCADIS submitted copies of pre-construction soil sampling results to private property owners Bruce Steele and Diana Steele Thompson, as required by the property access agreements.
- On October 7, ARCADIS received an executed copy of the property access agreement from Consumers Energy.

REPORT #4, OCTOBER 2009

- On October 7, ARCADIS submitted to MDNR, with copies to USEPA, MDEQ, and United States Fish
 and Wildlife Service (USFWS), a map estimating wetlands (based on National Wetland Inventory
 [NWI] wetland classifications) located in the removal areas and a technical memorandum presenting
 a hydraulic analysis of potential effects of removing the right diversion structure at the Plainwell No. 2
 Dam. This information was requested by MDNR, MDEQ, and USFWS when the Design Report was
 submitted. This information was outside the scope of the design report.
- On October 14, ARCADIS submitted the 9th Weekly Construction Update for the Plainwell No. 2 Dam Area TCRA to USEPA and MDEQ.
- On October 15, ARCADIS submitted to MDEQ an executed copy of the TMDL cooperative agreement.
- On October 15, ARCADIS submitted to USEPA the 3rd Monthly Report for the Allied Paper, Inc./Portage Creek/Kalamazoo River Superfund Site Plainwell No. 2 Dam Area TCRA for September 2009.
- On October 16 and 19, ARCADIS, USFWS, and MDNR discussed the footprint of the TCRA areas as
 they related to the wetlands maps submitted on October 7. ARCADIS will submit a revised figure to
 MDNR when the project as-built drawings are completed after completion of the construction.
- On October 16 and 19, ARCADIS, USEPA, and MDNR discussed information to be covered and
 potential dates for the next public meeting to be held in Plainwell, tentatively scheduled to be held
 during the first week of December.
- On October 20, ARCADIS submitted shape files for the wetlands delineation polygons to USFWS.
- On October 21, ARCADIS and Georgia-Pacific hosted the monthly Stakeholder's Meeting.
 Representatives from MDNR and USFWS attended the meeting.
- On October 22, ARCADIS attended the Kalamazoo River Phosphorus Point Source meeting for signees of the TMDL cooperative agreement.
- On October 22, ARCADIS submitted the 10th Weekly Construction Update for the Plainwell No. 2
 Dam Area TCRA to USEPA and MDEQ.
- On October 27, ARCADIS submitted the 11th Weekly Construction Update for the Plainwell No. 2
 Dam Area TCRA to USEPA and MDEQ.
- On October 29, ARCADIS submitted to Weston copies of the 9th, 10th, and 11th Weekly Construction Update for the Plainwell No. 2 Dam Area TCRA.

REPORT #4, OCTOBER 2009

Data Collected and Field Activities Conducted During the Period

- During the week of October 1, ARCADIS constructed access to Island 1, installed resuspension controls in Removal Area 2, completed removal activities in Removal Area 1 and Island 1, and continued removal activities in Removal Area 2. Four confirmation samples (TS20291 through TS20294) were collected from Removal Areas 1 and 2 and submitted for polychlorinated biphenyl (PCB) analysis. USEPA collected a split sample of TS20291 (PD2-100109-02-SD/TS20291). Two surface water samples (TS30135 and TS30136) were collected from the downstream and upstream, respectively, turbidity monitoring locations near the upstream grids (1 through 6) of Removal Area 2. A rinse blank (TS30137) was also collected. Table B summarizes the samples collected. Processed material from the staging area was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal.
- During the week of October 5, ARCADIS installed additional river closure signs, removed access to Island 1, installed resuspension controls in Removal Area 3A, removed resuspension controls in Removal Area 1, completed removal activities in Removal Area 2, began removal activities in Removal Area 3A, began restoration activities in Removal Areas 1 and 2, and began treatment and discharge of water collected at the Staging Area. Seven confirmation samples (TS20295 and TS20297 through TS20302) and one duplicate sample (TS20296) were collected from Removal Areas 2 and 3A and submitted for PCB analysis. Two surface water samples (TS30138 and TS30139) were collected from the downstream and upstream, respectively, turbidity monitoring locations near the upstream grids (1 through 11) of Removal Area 3A. A rinse blank (TS30140) was also collected. Two sets of wastewater samples (W_SA3_X_001 and W_SA3_X_002) were collected from the water treatment system located at Staging Area 3. Each set of wastewater samples consists of one influent (e.g., W_SA3_In_001), two mid-fluent (e.g., W_SA3_RM_001 and W_SA3_LM_001), and two effluent samples (e.g., W_SA3_RE_001 and W_SA3_LE_001). Table B summarizes the samples collected. Processed material from the staging area was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal.
- During the week of October 12, ARCADIS, installed resuspension controls in Removal Area 4A, removed resuspension controls in Removal Area 2, continued removal activities in Removal Area 3A, continued restoration activities in Removal Areas 1 and 2, and continued treatment and discharge of water collected at the Staging Area. Twelve confirmation samples (TS20303 through TS20315) and one duplicate sample (TS20316) were collected from Removal Area 3A and submitted for PCB analysis. USEPA collected a split sample of TS20303 (PD2-101209-03-SD/TS20303) and of TS20309 (PD2-101409-04-SD/TS20309). Two surface water samples (TS30141 and TS30143) were collected from the upstream and downstream, respectively, turbidity monitoring locations near the downstream grids (11 through 22) of Removal Area 3A. A duplicate sample (TS30142) and rinse

REPORT #4, OCTOBER 2009

blank (TS30144) were also collected. One set of water treatment samples (W_SA3_X_003) was collected from the water treatment system located at Staging Area 3. A duplicate of W_SA3_RE_003 (W_SA3_Dup_001) was also collected. Table B summarizes the samples collected. Processed material from the staging area was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal.

- During the week of October 19, ARCADIS installed resuspension controls in Removal Area 5A, removed resuspension controls in Removal Area 3A, completed removal activities in Removal Areas 3A and 4A, began removal activities in Removal Area 5A, continued restoration activities in Removal Areas 1 and 2, and continued treatment and discharge of water collected at the Staging Area. Fifteen confirmation samples (TS20317 through TS20331) were collected from Removal Areas 3A, 4A, and 5A and submitted for PCB analysis. USEPA collected a split sample of TS20322 (PD2-102009-05-SD/TS20322) and of TS20330 (PD2-102209-06-SD/TS20330). Two surface water samples (TS30145 and TS30146) were collected from the downstream and upstream, respectively, turbidity monitoring locations near Removal Area 5A. A rinse blank (TS30147) was also collected. A nine-part composite sample (TS10048) was collected from the topsoil source. The sample was submitted for diesel range organics (DROs), gasoline range organics (GROs), target compound list (TCL) volatile organic compounds (VOCs), TCL semi-volatile organic compounds (SVOCs), PCBs, TCL pesticides, total organic carbon (TOC), Resource Conservation and Recovery Act (RCRA) metal, pH, total organic carbon and grain size analysis. One set of water treatment samples (W_SA3_X_004) was collected from the water treatment system located at Staging Area 3. USEPA collected a split sample of W SA3 LE 004 (PD2-102309-01-WT/W SA3 LE 004). Table B summarizes the samples collected. Processed material from the staging area was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal.
- During the week of October 26, ARCADIS removed resuspension controls in Removal Area 4A, completed removal activities in Removal Areas 5A, continued restoration activities in Removal Areas 3A and 4A, began equipment demobilization activities, and continued treatment and discharge of water collected at the Staging Area. Six confirmation samples (TS20332 through TS20335 and TS20337 through TS20338) and one duplicate sample (TS20336) were collected from Removal Areas 3A and 5A and submitted for PCB analysis. Two surface water samples (TS30148 and TS30149) were collected from the downstream and upstream, respectively, turbidity monitoring locations near Removal Area 5A. A rinse blank (TS30150) was also collected. Two sets of water treatment samples (W_SA3_X_005 and W_SA3_X_006) were collected from the water treatment system located at Staging Area 3. Table B summarizes the samples collected. Processed material from the staging area was loaded into trucks and transported to the Ottawa County Farms Landfill in Coopersville, Michigan or the C&C Landfill in Marshall, Michigan for disposal.

REPORT #4, OCTOBER 2009

• As of October 31, approximately 4,700 cubic yards of material had been excavated from Removal Areas 1, 2, 3A, 4A, 5A and Island 1.

Laboratory Data Received During the Period

- During the week of October 1, ARCADIS received analytical data for confirmation samples TS20278 to TS20287 (collected in September).
- During the week of October 5, ARCADIS received analytical data for confirmation samples TS20288 to TS20290 (collected in September) and TS20291 to TS20300; USEPA split sample PD2-100109-02-SD/TS20291; and water treatment sample set W_SA3_X_001.
- During the week of October 12, ARCADIS received analytical data for confirmation samples TS20301 to TS20307; 6A aggregate and crushed concrete samples TS10042 and TS10043 (PCBs, TCL VOCs, TCL SVOCs, RCRA Metals, and TCL Pesticides DROs and GROs were received in September samples were collected in September); and water treatment sample set W_SA3_X_002.
- During the week of October 19, ARCADIS received analytical data for confirmation samples TS20308 to TS20323, TS20330, and TS20331; USEPA split samples PD2-101209-03-SD/TS20303, PD2-101409-04-SD/TS20309, and PD2-102009-05-SD/TS20322; and water treatment sample set W_SA3_X_003.
- During the week of October 26, ARCADIS received analytical data for confirmation samples TS20324 to TS20329 and TS20332 to TS20338; and water treatment samples sets W_SA3_X_004 and W_SA3_X_005.
- ARCADIS is awaiting analytical data for USEPA split samples PD2-102209-06-SD/TS30330 and PD2-102309-01-WT/W_SA3_LE_004, topsoil sample TS10048, surface water samples TS30132 to TS30150, and water treatment sample set W_SA3_X_006.

Issues Encountered and Actions Taken

- A PCB concentration of 6.9 milligrams per kilogram (mg/kg) was detected in soil sample TS20279, collected from Removal Area 1, Grid 6 on September 24. An additional 6 inches of material was excavated and sample TS20294 was collected on October 2. PCBs were not detected in the sample (<0.33 mg/kg). No additional excavation is warranted.
- A PCB concentration of 8.2 mg/kg was detected in soil sample TS20333, collected from Removal Area 5A, Grid 4 on October 26. An additional 6 inches of material was excavated and sample

REPORT #4, OCTOBER 2009

TS20338 was collected on October 28. A PCB concentration of 0.39 mg/kg was detected in the sample. No additional excavation is warranted.

- The owner of the McMurtrie property verbally confirmed that he would not sign the access agreement if the proposed location of Staging Area 2 was not altered because he is concerned it will interfere with daily activities on his property, which is currently utilized as a horse training facility. The proposed location for Staging Area 2 is located on the Simons' property adjacent to the McMurtrie property. ARCADIS and Georgia-Pacific are negotiating with the owner of the Simons property to move the location of Staging Area 2 and will continue negotiations in November (Table A).
- ARCADIS and Georgia-Pacific met with the owner of the Simons property in October and are
 negotiating a compensation package with the owner of the Simons property for access to their
 properties. The owner of the Simons property is reluctant to allow ARCADIS to access their property
 and remove the vegetation necessary to support removal activities.

Developments Anticipated During the Next Reporting Period

- During the week of November 2, ARCADIS is scheduled to remove resuspension controls from Removal Area 5A, continue equipment demobilization, continue restoration activities, and complete loading and transporting processed material to the appropriate landfill.
- During the week of November 9, ARCADIS is scheduled to continue equipment demobilization activities, continue restoration activities, install the canoe portage, and begin removal of Staging Area 3.
- During the week of November 16, ARCADIS is scheduled to host the monthly Stakeholder's Meeting, complete equipment demobilization activities, complete restoration activities for the 2009 construction season through Removal Area 5A, and complete removal of Staging Area 1.
- No field activities are scheduled for the weeks of November 23 or 30.
- In November, ARCADIS will continue submitting Weekly Construction Reports for the Plainwell No. 2
 Dam Area TCRA to USEPA.
- In November, ARCADIS will continue submitting copies of analytical data from Plainwell No. 2 Dam Area TCRA sampling activities to USEPA.

REPORT #4, OCTOBER 2009

Updates to the Former Plainwell Impoundment TCRA

- On October 1, ARCADIS followed up with USEPA regarding the draft technical memorandum submitted on September 15 regarding the recommended approach for addressing the bank stabilization issues in Removal Areas 8 and 9B. ARCADIS received approval from USEPA to implement the recommended approach for addressing the bank stabilization issues on October 8.
- On October 7, ARCADIS received from the TMDL cooperative copies of the cooperative's report on phosphorus discharge from the Former Plainwell Impoundment TCRA.
- During the week of October 26, ARCADIS began construction on the agreed upon approach to address bank stabilization issues in Removal Area 8 and 9B.
- During the week of October 26, ARCADIS began seeding of the haul road in Removal Areas 6B and 10A through 13A.
- On October 29, ARCADIS submitted to USEPA, MDEQ, MDNR, and USFWS the Former Plainwell Impoundment 2009 Bank Conditions Monitoring Report.

Developments Anticipated During the Next Reporting Period from the Former Plainwell Impoundment TCRA

- During the week of November 2, ARCADIS is scheduled to complete bank stabilization activities in Removal Area 8 and 9B.
- During the week of November 2, ARCADIS is scheduled to complete seeding of the haul road in Removal Areas 6B and 10A through 13A.
- ARCADIS awaits approval from USEPA of the Construction Completion report submitted in August 2009.

Table A — Summary of Property Access Agreements (as of October 31, 2009)

Date Sent	Property Owner	Pacel Number	Status
6/10/2009	Arcan Inc.	08-032-010-00	accepted (received 6/18/09)
5/22/2009	Consumers Energy	08-032-015-00	accepted (received 10/07/09)
7/31/2009	Diana Steele Thompson	08-032-005-10	accepted (received 8/4/09)
5/22/2009	Edward and Ronald Hodgman	08-032-027-00	accepted (received 6/3/09)
5/22/2009	Edward Mc Murtrie	08-032-042-00	in negotiations
5/22/2009	Howe Aluminum Products	08-032-028-00	accepted (received 6/3/09)
7/31/2009	MDNR	08-032-041-00 08-032-040-00	accepted (received 8/7/09)
5/22/2009	Michelle and Paul Simons	08-032-034-10 08-032-039-00 08-032-006-00	in negotiations
7/29/2009	Steele Trust	08-033-012-00 08-033-009-00 08-033-018-00	accepted (received 8/3/09)
8/4/2009	Ray Hendricksma	08-032-033-00	accepted (received 8/7/09)
0/4/2009	Terry Winkle	00-032-033-00	accepted (received 8/10/09)

<u>Table B — Summary of Samples Collected and Data Received in October 2009</u>

Sample ID	Sample Date	Data Received	Sample Delivery	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action Limit	Response Action		
		110001100	20		Confirmation Samples	Conductor					
TS20278	09/24/09 10/01	I	I		RA 1, Grid 5	PCBs	4.6 mg/kg	5 mg/kg	None		
TS20279		10/01/09	097354	KAR Labs	RA 1, Grid 6	PCBs	6.9 mg/kg	5 mg/kg	Excavate addiitonal 6 inches of material and resample (TS20294)		
TS20280	1				RA 1, Grid 7	PCBs	4.7 mg/kg	5 mg/kg	None		
TS20281	1				RA 1, Grid 8	PCBs	2.1 mg/kg	5 mg/kg	None		
TS20284					RA 1, Grid 9	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20285	00/00/00	40/00/00	000044	KARI	RA 1, Grid 10	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20286	09/29/09	10/02/09	093811	KAR Labs	RA 1, Grid 11	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20287	1				RA 1, Grid 12	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20288					RA 2, Grid 1	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20289	09/30/09	10/07/09	093831	KAR Labs	RA 2, Grid 2	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20290	1				RA 2, Grid 3	PCBs	2.4 mg/kg	5 mg/kg	None		
TS20291 ¹	10/01/09	10/08/09	093850	KAR Labs	RA 2, Grid 4	PCBs	4.2 mg/kg	5 mg/kg	None		
PD2-100109-02-SD/ TS20291	10/01/09	10/05/09	0910017	TriMatrix Laboratories	RA 2, Grid 4	PCBs	1.5 mg/kg J	5 mg/kg	None		
TS20292					RA 2, Grid 5	PCBs	3.7 mg/kg	5 mg/kg	None		
TS20293	10/01/09	10/08/09	093850	KAR Labs	RA 2, Grid 6	PCBs	0.87 mg/kg	5 mg/kg	None		
TS20294	10/02/09	10/02/09	093852	KAR Labs	RA 1 Grid 6	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20295	10,00,00	10,00,00				PCBs	0.86 mg/kg	5 mg/kg	None		
[TS20296]	10/05/09	10/08/09	093886	KAR Labs	RA 2, Grid 7	[PCBs]	[0.71 mg/kg]	[5 mg/kg]	[None]		
TS20297	1 . 5, 55, 55	10,00,00			RA 2, Grid 8	PCBs	3.1 mg/kg	5 mg/kg	None		
TS20298		10/09/09					RA 2, Grid 9	PCBs	0.89 mg/kg	5 mg/kg	None
TS20299	10/08/09		093959	KAR Labs	RA 2, Grid 10	PCBs	0.71 mg/kg	5 mg/kg	None		
TS20300	1				RA 3A, Grid 1	PCBs	0.75 mg/kg	5 mg/kg	None		
TS20301	40/00/00		40/45/00	00000=	1445.1.1	RA 3A, Grid 2	PCBs	0.33 mg/kg U	5 mg/kg	None	
TS20302	10/09/09		093995	KAR Labs	RA 3A, Grid 3	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20303 ¹	10/12/09	10/15/09	094010	KAR Labs	RA 3A, Grid 4	PCBs	0.4 mg/kg	5 mg/kg	None		
PD2-101209-03-SD/ TS20303	10/12/09	10/21/09	0910192	TriMatrix Laboratories	RA 3A, Grid 4	PCBs	0.41 mg/kg J	5 mg/kg	None		
TS20304							RA 3A, Grid 5	PCBs	0.33 mg/kg U	5 mg/kg	None
TS20305	10/12/09	10/15/09	094010	KAR Labs	RA 3A, Grid 6	PCBs	3.0 mg/kg	5 mg/kg	None		
TS20306	10/10/00	40/40/00	004045	1445.1.1	RA 3A, Grid 7	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20307	10/13/09	10/16/09	094045	KAR Labs	RA 3A, Grid 8	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20308	10/11/00	40/04/00	004070	1445.1.1	RA 3A, Grid 11	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20309 ¹	10/14/09	0/14/09 10/21/09	10/14/09 10/21/09	094079	KAR Labs	RA 3A, Grid 12	PCBs	0.33 mg/kg U	5 mg/kg	None	
PD2-101409-04-SD/				TriMatrix							
TS20309	10/14/09	10/21/09	0910243	Laboratories	RA 3A, Grid 12	PCBs	0.24 mg/kg J	5 mg/kg	None		
TS20310	10/14/09	10/21/09	094079	KAR Labs	RA 3A, Grid 13	PCBs	0.48 mg/kg	5 mg/kg	None		
TS20311	10/15/09	10/22/09	094088	KAR Labs	RA 3A, Grid 14	PCBs	3.0 mg/kg	5 mg/kg	None		
TS20312					RA 3A, Grid 15	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20313	1				RA 3A, Grid 16	PCBs	0.63 mg/kg	5 mg/kg	None		
TS20314	10/16/09	10/22/09	094135	KAR Labs	RA 3A, Grid 17	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20315	1		331.33			PCBs	0.36 mg/kg	5 mg/kg	None		
[TS20316]					RA 3A, Grid 18	[PCBs]	[0.42 mg/kg]	[5 mg/kg]	[None]		
TS20317					RA 3A, Grid 19	PCBs	1.7 mg/kg	5 mg/kg	None		
TS20318	10/19/09	0 40/00/00	22/09 094147	KAR Labs	RA 3A, Grid 20	PCBs	4.2 mg/kg	5 mg/kg	None		
TS20319] 10/19/09	10/22/09		NAIN Labb	RA 3A, Grid 21	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20320					RA 3A, Grid 22	PCBs	2.1 mg/kg	5 mg/kg	None		
TS20321	10/20/00	10/23/09	00/176	KARLaha	RA 4A, Grid 1	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20322 ¹	10/20/09	10/23/09	094176	KAR Labs	RA 4A, Grid 2	PCBs	0.33 mg/kg U	5 mg/kg	None		

<u>Table B — Summary of Samples Collected and Data Received in October 2009</u>

Sample ID	Sample	Data	Sample	Laboratory	Sample Location	Analysis	PCB Result	PCB Action	Response Action		
•	Date	Received	Delivery		· ·	Conducted		Limit			
PP0 400000 05 0D/	T	ı	т т	Tuilda tuis	Confirmation Samples (cont'd)	ı			T		
PD2-102009-05-SD/ TS20322	10/20/09	10/21/09	0910334	TriMatrix Laboratories	RA 4A, Grid 2	PCBs PCBs	0.064 mg/kg J	5 mg/kg	None		
	10/20/00	40/02/00	004470		DA 4A C-:	DCDa	4.7.000/100	F	None		
TS20323	10/20/09	10/23/09	094176	KAR Labs	RA 4A, Grid 3	PCBs	1.7 mg/kg	5 mg/kg	None		
TS20324	4				RA 4A, Grid 4	PCBs	2.1 mg/kg	5 mg/kg	None		
TS20325	10/01/00	40/00/00	004405	KADLaha	RA 4A, Grid 5	PCBs	4.2 mg/kg	5 mg/kg	None		
TS20326	10/21/09	10/26/09	094195	KAR Labs	RA 4A, Grid 6	PCBs	4.1 mg/kg	5 mg/kg	None		
TS20327	4				RA 4A, Grid 7	PCBs	2.7 mg/kg	5 mg/kg	None		
TS20328					RA 4A, Grid 8	PCBs	2.6 mg/kg	5 mg/kg	None		
TS20329	10/22/09	10/26/09	094215	KAR Labs	RA 4A, Grid 9	PCBs	2.1 mg/kg	5 mg/kg	None		
TS20330 ¹	10/22/00	10/23/09	094213	KAR Labs	RA 5A, Grid 1	PCBs	0.33 mg/kg U	5 mg/kg	None		
PD2-102209-06-SD/	10/22/09	NR	NR	TriMatrix	RA 5A, Grid 1	PCBs	_	_			
TS20330	10/22/09	NK	NK	Laboratories	KA 5A, GHU 1	PCBS	,	-	-		
TS20331	10/22/09	10/23/09	094213	KAR Labs	RA 5A, Grid 2	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20332		10/27/09	094255	KAR Labs	RA 5A, Grid 5	PCBs	0.73 mg/kg	5 mg/kg	None		
	1								Excavate addiitonal 6		
TS20333					RA 5A, Grid 4	PCBs	8.2 mg/kg	5 mg/kg	inches of material and		
	10/00/00		094255	KAR Labs	- ,		514 1119/119	3 3	resample (TS20338)		
TS20334	10/26/09	10/27/09			RA 5A, Grid 3	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20335	1	10/21/00			RA 3A, Grid 9	PCBs	0.33 mg/kg U	5 mg/kg	None		
[TS20336]						[PCBs]	[0.33 mg/kg U]	[5 mg/kg]	[None]		
TS20337	†				RA 3A, Grid 10	PCBs	0.33 mg/kg U	5 mg/kg	None		
TS20338	10/28/09	10/29/09	094310	KAR Labs	RA 5A, Grid 4	PCBs	0.39 mg/kg	5 mg/kg	None		
1320338	10/20/09	10/29/09	094310	IVAIN Labs	Fill Material Sampling	I CD3	0.59 mg/kg	3 Hig/kg	None		
		09/22/09	ı		Fill Material Sampling	PCBs, TCL VOCs, TCL			1		
			093507 (KAR)	KAR Labs and	O part composite comple from 6A aggregate						
TS10042	09/08/09	(KAR) and	and KAL478 (TAL)	TAL	9-part composite sample from 6A aggregate material	SVOCs, RCRA Metals, and TCL	0.056 mg/kg U	4 mg/kg	None ²		
		10/14/09				Pesticides (TAL) DROs and					
		(TAL)	` '			GROs (KAR)					
		09/22/09	093507 (KAR)		9-part composite sample from crushed concrete	PCBs, TCL VOCs, TCL	0.052 mg/kg U	4 mg/kg	None ²		
TS10043	09/08/09	(KAR) and 10/14/09	and KAL478 KAF	KAR Labs and							
1010043	03/00/03		(TAL)	TAL	material	Pesticides (TAL) DROs and					
		(TAL)	(TAL)			GROs (KAR)					
						PCBs, TCL VOCs, TCL					
						SVOCs, RCRA Metals, and TCL	_				
TS10048	10/22/09	NR	NR	KAR Labs and	9-part composite sample from topsoil	Pesticides, total organic carbon,		<u>-</u>	_		
				TAL	part composite composite com cope com	grain size, and pH (TAL) DROs					
						and GROs (KAR)					
					Surface Water Samples	a 5. 100 (. u 1)					
TS30132	T T	Ι	T T		RA-1 Grids 1-8; 300 feet downstream	PCBs	<u>.</u> I	-	T -		
TS30132	09/24/09	NR	NR	TAL	RA-1 Grids 1-8; 200 feet upstream	PCBs	-	<u> </u>	<u>-</u>		
TS30134	03/24/03	NK NK	INK	INE	INIX	IAL		PCBs			
					Rinse Blank		-	-	-		
TS30135	10/04/00	ND	ND	T ^ 1	RA-2, Grids 1-6; 300 feet downstream	PCBs	-	-	-		
TS30136	10/01/09	NR	NR	TAL	RA-2, Grids 1-6; 200 feet upstream	PCBs	-	-	-		
TS30137					Rinse Blank	PCBs	-	•	-		
TS30138		NR			RA-3A, Grids 1-11; 300 feet downstream	PCBs	-	-	-		
TS30139	10/08/09		NR	TAL	RA-3A, Grids 1-11; 200 feet upstream	PCBs	-	-	-		
TS30140					Rinse Blank	PCBs	-	-	-		
TS30141]				RA-3A Grids 11-22, 200 feet upstream	PCBs	-	-	-		
[TS30142]	10/15/09	NR	NR	TAL	RA-3A Grids 11-22, 200 feet upstream	PCBs	-	-	-		
TS30143] 10/13/09	INIX	INE	IAL	RA-3A Grids 11-22, 300 feet downstream	PCBs	-	-	-		
TS30144	1				Rinse Blank	PCBs	-	-	-		
TS30145					RA-5A, 300 feet downstream	PCBs	-	-	-		
TS30146	10/22/09	NR	NR	TAL	RA-5A, 200 feet upstram	PCBs	-	-	-		
TS30147	1		'	1/_	Rinse Blank	PCBs	_	-	-		
1000177					MINOC DIGHT	1 003					

<u>Table B — Summary of Samples Collected and Data Received in October 2009</u>

Sample ID	Sample Date	Data Received	Sample Delivery	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action Limit	Response Action
					Surface Water Samples (cont'd)				
TS30148					RA-5A, 300 feet downstream	PCBs	-	-	-
TS30149	10/29/09	NR	NR	TAL	RA-5A, 200 feet upstram	PCBs	-	-	-
TS30150					Rinse Blank	PCBs	-	-	-
					Water Treatment Samples				
W_SA3_In_001					Influent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_RM_001					Right side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_RE_001	10/05/09	10/08/09	093885	KAR Labs	Right side Effluent; SA 3 Water Treatment	PCBs, TSS, P	< 0.1 μg/L	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L; P=0.13 mg/L, No Action Limit
W_SA3_LM_001					Left side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_LE_001					Left side Effluent; SA 3 Water Treatment	PCBs, TSS, P	< 0.1 μg/L	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L; P=0.06 mg/L, No Action Limit
W_SA3_In_002					Influent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_RM_002					Right side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_RE_002	10/08/09	10/13/09	093960	KAR Labs	Right side Effluent; SA 3 Water Treatment	PCBs and TSS	< 0.1 μg/L	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA3_LM_002	1				Left side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_LE_002					Left side Effluent; SA 3 Water Treatment	PCBs and TSS	< 0.1 μg/L	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA3_In_003					Influent; SA 3 Water Treatment	PCBs	0.1 μg/L	No Action Limit	None
W_SA3_RM_003	1	10/19/09	09 094080		Right side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_RE_003 [W_SA3_Dup_001]	10/14/09			KAR Labs	Right side Effluent; SA 3 Water Treatment	PCBs and TSS	< 0.1 μg/L [< 0.1 μg/L]	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L [None: TSS = <4 mg/L, Action Limit = 45 mg/L]
W_SA3_LM_003	1				Left side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_LE_003					Left side Effluent; SA 3 Water Treatment	PCBs and TSS	< 0.1 μg/L	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA3_In_004					Influent; SA 3 Water Treatment	PCBs	1 μg/L	No Action Limit	None
W_SA3_RM_004					Right side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_RE_004	10/23/09 10/26/09	10/26/09	0/26/09 094216	094216 KAR Labs	Right side Effluent; SA 3 Water Treatment	PCBs and TSS	< 0.1 μg/L	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L
W_SA3_LM_004					Left side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None
W_SA3_LE_004 ¹					Left side Effluent; SA 3 Water Treatment	PCBs and TSS	< 0.1 μg/L	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L
PD2-102309-01-WT/ W_SA3_LE_004	10/23/09	NR	NR	TriMatrix Laboratories	Left side Effluent; SA 3 Water Treatment	PCBs	-	-	-

Table B — Summary of Samples Collected and Data Received in October 2009

Sample ID	Sample Date	Data Received	Sample Delivery	Laboratory	Sample Location	Analysis Conducted	PCB Result	PCB Action Limit	Response Action		
Water Treatment Samples (cont'd)											
W_SA3_In_005				KAR Labs	Influent; SA 3 Water Treatment	PCBs	0.1 μg/L	No Action Limit	None		
W_SA3_RM_005					Right side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None		
W_SA3_RE_005	10/26/09	10/29/09	094256		Right side Effluent; SA 3 Water Treatment	PCBs, TSS, P	< 0.1 μg/L	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L; P=0.04 mg/L, No Action Limit		
W_SA3_LM_005					Left side Mid-fluent; SA 3 Water Treatment	PCBs	< 0.1 µg/L	No Action Limit	None		
W_SA3_LE_005					Left side Effluent; SA 3 Water Treatment	PCBs, TSS, P	< 0.1 μg/L	0.2 μg/L per discharge; Monthly Average of 2.6 x 10-5 μg/L	None: TSS = <4 mg/L, Action Limit = 45 mg/L; P=0.03 mg/L, No Action Limit		
W_SA3_In_006					Influent; SA 3 Water Treatment	PCBs	-	-	-		
W_SA3_RM_006				NR KAR Labs	Right side Mid-fluent; SA 3 Water Treatment	PCBs	-	-	-		
W_SA3_RE_006	10/30/09	NR	NR		Right side Effluent; SA 3 Water Treatment	PCBs and TSS	-	-	-		
W_SA3_LM_006]				Left side Mid-fluent; SA 3 Water Treatment	PCBs	-	-	-		
W_SA3_LE_006					Left side Effluent; SA 3 Water Treatment	PCBs and TSS	-	-	-		

Notes:

- 1 Split of the sample collected by USEPA.
- 2 Analytical results compared to applicable Part 201 cleanup criteria and Part 213 RBSLs provided in MDEQ's RRD Operational Memorandum No. 1 (Table 2, Column #19, Direct Contact Criteria & RBSLs).
- * Duplicate samples are shown in brackets.
- * Analytical results have not been validated.

DRO - diesel range organic

GRO - gasoline range organic

J - The compound was positively identified; however, the associated numerical value is an estimated concentration only.

mg/kg - milligrams per kilogram

MDEQ - Michigan Department of Environmental Quality

NR - not received

P - total phosphorus

PCBs - polychlorinated biphenyls

RA - Removal Area

RBSL - Risk Based Screening Level

RCRA - Resource Conservation and Recovery Act

RRD - Remediation Redevelopment Division

SA - Staging Area

SVOCs - semivolatile organic compounds

TAL - TestAmerica Laboratories

TCL - target compound list

TSS - total suspended solids

U - Compound analyzed but not detected at a concentration above the reporting limit

USEPA - United States Environmental Protection Agency

VOCs - volatile organic compounds